



A Recipe for Disaster Viva! Broiler Chicken Fact Sheet

Plucked from the jungles of south-east Asia, chickens have been kept by humans for at least 4,000 years. At first they were bred for cock fights, so were a source of gruesome entertainment before they were killed for food. The past 50 years have seen dramatic changes in the way chickens are kept and their body shape has been drastically altered by genetic selection. But, as breeding has focused on physical production, their biological instincts remain. When returned to the wild, domestic chickens soon begin to behave like their jungle-fowl ancestors. (10)

Broiler chickens are the most widely farmed animal. 40 billion are killed worldwide every year. Over 800 million are killed in the UK annually. Broiler rearing is now the most intensified and automated type of livestock production. In 2006, the overall UK chicken industry was worth £3 billion in the UK (9).

A typical broiler chicken spends his life in a windowless shed with thousands of other birds. Today's chickens are slaughtered when their eyes are still blue and they 'cheep' - chicks in an obese adult body. In natural conditions, birds of this age would still be sheltering under their mothers' wings. Decades of selective breeding has resulted in this forced growth rate, producing faster growing chickens for greater profits with no regard for animal welfare. Many broilers can no longer support their own body weight and most suffer from leg disorders. The crippled birds die from starvation and dehydration as they are unable to reach food and water points. Millions suffer from diseases brought on by the squalid conditions inside the factory farms.

The broiler shed

98% of broiler production in the UK is intensive (2). Each shed usually houses 30,000 chickens or more. One day old chicks are put into the sheds and housed there until they are slaughtered 6 weeks later. Large numbers of birds being housed together makes them susceptible to heat stress. Heat stress causes suffering and death in birds (8).

Lighting in broiler sheds

Most broilers are reared indoors without windows under dim artificial light. Many are kept in near-constant light because this is believed to increase feed intake. The lighting is kept dim because this discourages 'unnecessary activity', thus maximising growth. Scientific evidence shows that preventing broilers from having a proper night period adversely affects their welfare. Evidence shows that lack of sleep reduces an animal's ability to cope with stressful conditions. The low level of activity shown by broilers reared under dim lighting is likely to predispose them to leg disorders. Continuous lighting programs also cause eye abnormalities (11).

Problems with high stocking densities

In the UK, the suggested maximum stocking densities are 34kg/m squared (approx. 17 birds per metre squared) (11) but most producers stock at even higher densities than this as there are no legally-binding regulations. The UK government suggests no more than 34kg but even this is too strict for the industry, which sets itself a limit of 38kg (14). The EU science committee said that the stocking density must be no higher than 25kg/m (about 12 birds) per square metre 'for major welfare problems to be largely avoided' (Defra's guidelines for free-range broilers are not more than 27.5kg/m, so even these do not meet the European suggestions). As a guideline, each bird in an intensive house has less space than an A4 piece of paper. In general, as stocking density increases management standards worsen. For example, regular inspection to monitor flock health and remove dead or injured birds is difficult without causing panic and more injury (12). Severe overcrowding leads to a build-up of infectious agents and serious welfare problems such as breast blisters, contact dermatitis and leg disorders (5).

New legislation that sets out minimum standards for the protection of chickens reared for meat will become legally binding in 2010, and will bring common standards for the treatment of chickens across Europe. This is the first piece of legislation that specifically concerns chickens raised for meat and therefore the first time that the chicken industry has had legal guidelines to stick to in regards to stocking density. However, this Directive will permit producers to stock chickens at 42kg per square metre (21 birds per square metre), a density far higher than recommended for better welfare and even higher than the one currently set by the British poultry industry!

Poor litter management

Broiler chickens spend their entire lifetime without having their bedding changed. As a result, the ground inside the sheds quickly becomes soiled and wet. When on poor litter, broilers are susceptible to pododermatitis (foot-rot) and burnt hocks. Litter becomes wet due to air change rate; litter material and depth; stocking density and diet and health of the birds (7).

Mutilation

Any farm that feels that it must undertake mutilations of animals to prevent them injuring one another has very poor management systems.

Debeaking - When chicks are only a few days old, their beaks can be partially amputated, a section of the upper beak being cut off with a red-hot blade or with clippers. Beak trimming is painful and can result in permanent pain. Ex- farm and slaughterhouse worker, Colin Ryder says the following, "The correct hot knife was, in the time I was there, never used. Anything to hand was used for beak trimming. I have witnessed nail scissors, toe clippers etc being used. I have on occasion done this. I have seen chicks with blood spurting out of their beaks as they 'cheeped'. I have witnessed a couple of hundred birds subsequently die because of one member of staff cutting too much beak off."

Dubbing - Involves the removal with scissors of the birds comb (fleshy red crest on the head of the chicken). Dubbing is said by vets to cause stress and unnecessary mutilation (Black's Veterinary Dictionary). It is carried out to prevent birds from pecking each others combs and to discourage cannibalism which only occurs in overcrowded conditions.

Toe cutting - The last joint of the inside toe of male breeding birds is sometimes removed. This can result in open wounds, blood loss and pain. This mutilation is performed to 'avoid injury to hens during mating'.

Dewinging - When farmers want to prevent chickens from flying, dewinging is carried out. The flight feathers of one wing are clipped.

Leg problems with broilers

In modern genotypes of broiler chickens, lameness inevitably develops even though the birds are slaughtered at 41 days. Chickens are bred to gain weight so rapidly that their legs are sometimes unable to support them properly. In the worst cases they can only walk by crawling on their shanks (part of the leg between the hock and the ankle). Birds have been genetically selected to grow rapidly resulting in abnormally high loads being placed on relatively immature bones and joints (6).

Scientists have found that factory farmed chickens, crippled through being forced to grow abnormally fast in overcrowded conditions, will seek relief by choosing to eat food containing pain-killer if given the chance (4).

Catching the chickens

Teams of 'Catchers' work at high speed to load up huge transport lorries with the chickens when they reach 'slaughter weight'. Birds are grabbed and carried, several in each hand, to be flung into crates. Legs and wings often break and crippled birds endure agony on the journey to the slaughterhouse. Colin Ryder says, "Catchers carry 2 bunches of hens by one leg, upside down. When angry or behind schedule I have seen the bunch hit against walls to stop them squarking and flapping."

Transporting problems

Over 700 million broiler chickens are transported by road to slaughter plants in the UK every year (others are slaughtered on farms). Many birds are transported in modular systems in which 16-25 birds are placed in each transport container or "drawer". A vehicle may carry up to 24 modules containing 12 drawers and thus more than 6000 birds may be carried on a single journey.

Catching and transport is incredibly stressful and many birds do not reach the slaughterhouse alive (1.7 million birds a year) (1). Broilers have to cope with withdrawal of food and water, acceleration and vibration, noise and social disruption and hot and cold draughts (1). Careless handling means that birds' skulls can be crushed and that dislocated hips are commonplace.

Slaughter

Inside the slaughterhouse, birds are shackled by their feet. The process of hanging live birds upside down prior to slaughter causes extreme stress and has led scientists to investigate alternative options for the stunning and slaughter of poultry. Despite this, the vast majority of birds in British abattoirs continue to be shackled alive.

The shackle line carries the birds to the electronic waterbath where they will suffer a painful electric shock. Many birds do not get stunned due to not making contact with the water. These birds are fully conscious while they are having their necks cut. Even chickens that are stunned often regain consciousness before reaching the neck cutter.

After the birds' throats are cut by the automatic blades, they are moved on to the scalding tank, where feathers are loosened prior to plucking. Some birds are still alive at this stage if they have been missed by the 'neck cutter' and the 'back up killer' who manually breaks the necks of birds missed by the machine. Birds will pass the back up killer at a speed of up to 150 birds a minute so he will only have about half a second to check each one (12).

Broiler disease and mortality

Millions of chickens die every year from heart attacks, fatty livers and kidneys, colisepticaemia (blood poisoning), viral arthritis and perosis (displacement of the tendons and inability for the leg to support the bird's weight). Mortality rates on British farms are about 5.1 per cent, which means that around 45 million chickens in Britain die before they reach slaughter each year (11).

In the squalor of the broiler house infections spread like wildfire. Salmonella, Listeria, Campylobacter and botulism all thrive in the sheds. A huge percentage of birds slaughtered for human consumption have these diseases and chicken pieces are often the salvaged parts of damaged or diseased birds that cannot be sold as whole chickens.

A report by Earthsave, 'What About Chicken?' said, "Factory farms are fertile breeding grounds for disease, and many commercial livestock feeds are tainted with Salmonella. Additionally, today's slaughterhouses do an excellent job of dispersing pathogens from bird to bird." (3).

There are many other common diseases on the broiler unit including the following:

Ascites - The right side of the heart becomes enlarged due to its increased workload during the bird's rapid growth. The bird breathes quickly and the lungs become congested. Liver function is affected, the abdomen becomes swollen with fluid increasing the risk of heart failure. Ascites is a major cause of death in broilers - an estimated 4.7 per cent worldwide have the disease (11).

Sudden Death Syndrome - is also a major cause of death in broilers. SDS is acute heart failure. Symptoms are sudden vigorous wing flapping, muscle contractions and loss of balance. The birds often cry out then keel over and die (11).

Skin diseases - The most common disorders are lesions on the parts of the body in prolonged contact with litter, mainly the feet, hocks and breast. These are known as

ammonia burns, hock burns ulcers or blisters. They are often very painful and covered with crusts formed by discharge and faecal material in the litter, and become infected by a variety of bacteria and fungi. The ulcers act as a gateway for infection, which can spread through the bloodstream causing joint inflammations.

Scabby hip syndrome - Broilers are also prone to deep dermatitis, causing swelling and inflammation below the skin. This is commonly the result of scratches becoming infected by bacteria, particularly *Escherichia coli* (*E. coli*) which leads to scabby hip syndrome (11).

The use of drugs

Antibiotics and antimicrobials are routinely added to chicken's feed in a desperate attempt to control the diseases that run rife in the broiler sheds. Scientists warn that antibiotic resistant organisms have emerged due to the over use of antibiotics on farm animals putting human health and life at risk. The following are just a small sample of drugs used:

Nicarbazin, shown to cause birth defects and hormonal problems in animal studies, has never been carefully evaluated for safety in humans. In 1999, 17.8 per cent of chicken livers tested had residues of nicarbazin in excess of the maximum residue limit (13).

Lasalocid is a member of the potent cardio-toxic ionophore family of drugs and in 1999 was found in 12 per cent of chicken muscle tested (13).

Dimetridazole (DMZ) is suspected of being able to induce both cancer and birth defects, and is banned from livestock feed in Canada, yet in 2000, 2.6 per cent of broiler feed tested contained DMZ (13).

Health implications of eating chicken

A report by Earthsave says, "Handling chicken has gotten so precarious (Time magazine calls raw chicken 'one of the most dangerous items in the American home') even government officials recommend treating poultry as if it were laden with lethal microbes. A recent report summarizing 55 different studies found that approximately 30 per cent of chicken is contaminated with *Salmonella* and 62 per cent with its cousin, *Campylobacter*. These two pathogens are responsible for 80 percent of the illnesses and 75 percent of the deaths associated with meat consumption (USDA)."

The situation in the UK is not much better. A report in the Guardian in January 2000 revealed that two in five poultry slaughterhouses are failing to comply fully with hygiene requirements, and 40% of chickens contain either the *Salmonella* or *Campylobacter* food poisoning bugs (2).

In an October 1996 Which? report, a random sample of 90 chickens were bought from major supermarkets and butchers. Of these 32 were found to be unfit for human consumption. Tests on a further 160 chickens revealed that almost 20% contained *Salmonella*, while *Campylobacter* was found in more than a third.

The poultry industry is guilty of having totally disregarded bird welfare in its quest for fast bird growth and maximum profits. It is not just the birds who are suffering -

diseases are spreading due to the overcrowded conditions and humans are now paying the price.

References

1. Improving broiler transport. Roslin Institute and Silsoe research institute. 2000.
2. Foul Deeds by Sustain, 1999.
3. Earthsave. What about chicken? April 2000.
4. CIWF. March 2000. (Danbury, T, C et al. Self- Selection of the analgesic drug carprofen by lame broiler chickens. March 2000).
5. Welfare of broilers. CIWF. Nov. 2000.
6. Kestin, S,C et al. Relationships in broiler chickens between lameness, liveweight, growth rate and age. February 2001.
7. Poultry Litter Management. MAFF. 1997.
8. Heat Stress in Poultry. MAFF. 1995.
9. Fears for the Chicken Industry. IC Wales. May 2006.
10. She's a lot smarter than you think. The Daily Telegraph. 26.4.00
11. Behind closed doors. RSPCA. 2002.
12. Sentenced to Death. Rebecca Smith. Viva! 2000.
13. Richard Young and Alison Craig. The truth about drugs and poultry. The Soil Association. 2002
14. The Observer. The Cluck Stops Here. March 2002.